

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

PARALLEL NETWORKS, LLC,

Plaintiff,

v.

ABERCROMBIE & FITCH CO., et al.,

Defendants.

Case No. 6:10-CV-00111-LED

JURY TRIAL DEMANDED

PARALLEL NETWORKS, LLC,

Plaintiff,

v.

BACKSTAGE WEB, INC., et al.,

Defendants.

Case No. 6:12-CV-00374-LED

JURY TRIAL DEMANDED

**DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF
INVALIDITY ON INDEFINITENESS**

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Exhibit A – U.S. Patent No. 6,446,111

Exhibit B – Declaration of Denning

I. INTRODUCTION

The '111 patent is a model of obscurity in patent claiming. The patentee used claim terms that not only lack a concrete definition (intrinsically or extrinsically) but are not even used in the patent specification. The '111 patent also relies on unbounded terms of degree throughout the claims and the description of the preferred embodiment. Consequently, the asserted claims of the '111 patent contain internal contradictions, a lack of definite structure, and ambiguities that a person of ordinary skill in the art ("POSITA") could not resolve with reasonable certainty. The patentee's failure to set forth the invention in definite terms has encouraged the plaintiff to arbitrarily draw and redraw lines around the alleged infringing activity in whatever manner it believes will survive the latest adverse ruling on claim scope. Therefore, all Defendants¹ in the above-captioned cases respectfully move for summary judgment of invalidity of U.S. Patent No. 6,446,111 because the claims asserted by Plaintiff Parallel Networks, LLC ("Parallel") include one or more limitations that fail to satisfy the definiteness requirement of 35 U.S.C. § 112, ¶ 2.

All asserted claims depend from independent Claims 1 and 17, which include three limitations that Defendants have identified as indefinite. A finding of

¹ The remaining Defendants that have not been granted summary judgment include: Backstage Web Inc.; Bloomingdale's Inc.; Christian Audigier Inc.; Internet Brands, Inc.; Jos. A. Banks Clothiers Inc.; The Territory Ahead Inc. and Walt Disney Parks and Resorts Online ("WDPRO"). WDPRO is not joining this motion in view of its imminent settlement with Parallel and will file a joint motion to stay its deadline until it is officially dismissed. The other remaining Defendants that have been granted summary judgment, but have not yet been dismissed, include: Kayak Software Corporation; Orbitz LLC; Orbitz Away LLC; Orbitz Worldwide Inc.; Orbitz Worldwide LLC and Wolverine World Wide, Inc. The Court has not yet determined the classification of Ballard Designs Inc. or Shoebuy.com, Inc. but both parties join this motion. All Defendants other than WDPRO join this motion.

indefiniteness for any of these terms would render all asserted claims indefinite. Dependent Claim 15 includes an additional limitation that Defendants have also identified as indefinite. The indefinite limitations are identified below.

	Claim Term or Element	Asserted Claims
1.	data items pre-loaded values	1, 14, 17 1, 2, 14, 15, 17, 23, 26
2.	[a data interface capability] configured to provide a plurality of operations on [the pre-loaded values]	1, 14, 17
3.	substantially all functionality required by the pre-loaded values	15

These types of claim terms were recently criticized by the Supreme Court in *Nautilus*: “absent a meaningful definiteness check, we are told, patent applicants face powerful incentives to inject ambiguity into their claims...Eliminating that temptation is in order, and ‘the patent drafter is in the best position to resolve the ambiguity in ... patent claims.’”). *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. ___, 134 S. Ct. 2120, 2124 (2014).

The issues presented here are pure questions of law and are ripe for summary judgment. Accordingly, Defendants respectfully request that the Court find the above claims—and any claims depending therefrom—invalid for failure to satisfy the definiteness requirement of 35 U.S.C. § 112, ¶ 2.

II. STATEMENT OF ISSUES

Whether Defendants are entitled to summary judgment of invalidity for the patentee’s failure to satisfy the definiteness requirement of 35 U.S.C. § 112, ¶ 2 for any of the following terms:

Issue #1: “data items” and “pre-loaded values.” (Claims 1 and 17)

Issue #2: “[a data interface capability] configured to provide a plurality of operations on [the pre-loaded values].” (Claims 1 and 17)

Issue #3: “substantially all functionality required by the pre-loaded values.” (Claim 15)

III. STATEMENT OF UNDISPUTED MATERIAL FACTS

1. Exhibit A is a true and correct copy of the ‘111 patent, filed on Jun 18, 1999.
2. The term “data items” is used in at least asserted claims 1, 14, 17.
3. The term “pre-loaded value” is used in at least asserted claims 1, 2, 14, 15, 17, 23, 26.
4. The term “pre-loaded value” does not appear in the ‘111 patent specification, except the summary where the specification parrots parts of the language of the claims without further description. ‘111 patent at 2:41-51. The ‘111 patent does not define “pre-loaded values.”
5. The ‘111 patent does not define “data items.”
6. The phrase “constituent system associated with the applet” does not appear in the ‘111 patent specification, except the summary where the specification parrots parts of the language of the claims without further description. ‘111 patent at 2:41-51.
7. The phrase “a data interface capability configured to provide a plurality of operations on the pre-loaded values” is used in at least asserted claims 1, 14, 17.
8. The term “data interface capability” does not appear in the ‘111 patent specification. The ‘111 patent does not define “a data interface capability configured to provide a plurality of operations on the pre-loaded values.”

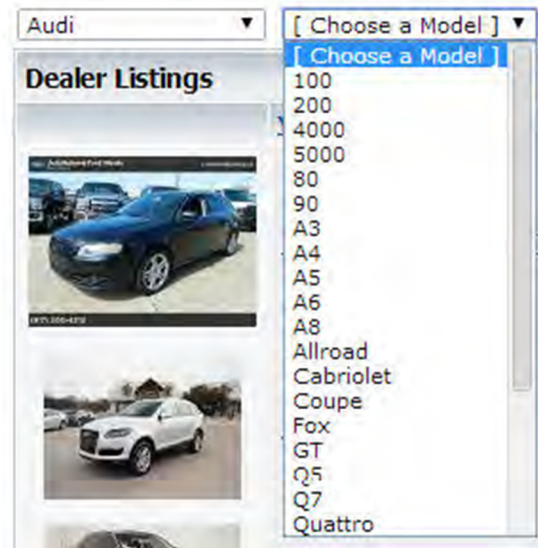
9. The phrase “substantially all functionality required by the pre-loaded values” is used in at least asserted claim 15. The ‘111 patent does not define “substantially all functionality required by the pre-loaded values.”

10. Exhibit B contains copies of excerpted pages from the Declaration of Denning (Dkt. No. 796).

11. Parallel’s expert Mr. Denning identifies lines 680-685 of audiforums.com web page code as constituting a “subset of the data items, each data item in the subset used as at least one pre-loaded value in the applet.” Denning Decl. ¶¶ 97-100, Exhibit B.

12. Parallel’s expert Mr. Denning points to two JavaScript functions in audiforums.com web page code, “populateMakes()” at line 688 and “populateModels(makeIndex, modelName)” at line 716, as comprising a data interface capability configured to provide a plurality of operations on pre-loaded values. Denning Decl. ¶ 101, Exhibit B.

13. Parallel’s expert Mr. Denning states that these “JavaScript functions including [sic] loading the dropdown boxes with car makes (Audi) and corresponding models as shown below. . .”



Denning Decl. ¶ 101, Exhibit B.

IV. LAW OF CLAIM CONSTRUCTION

Claim construction is a question of law for the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-90 (1996). “[C]laims ‘must be read in view of the specification, of which they are a part.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (quoting *Markman*, 52 F.3d at 979). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); see also *InTouch Technologies, Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1339 (Fed. Cir. 2014) (“We must read claims in view of the specification, which is the single best guide to the meaning of a disputed term.”). “[T]he context in which a term is used in the asserted claim can be highly instructive,” and “[often] provides a firm basis for construing the term.” *Phillips*, 415 F.3d at 1314.

V. ARGUMENT

A. The § 112 issues presented here are purely legal and should be resolved on summary judgment.

Summary judgment is appropriate when there is no genuine issue of material fact. *See* Fed. R. Civ. P. 56(c); *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1297-98 (Fed. Cir. 2005). The moving party bears the initial burden of “informing the district court of the basis for its motion” and identifying the matter that “it believes demonstrate[s] the absence of a genuine issue of material fact.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). If the moving party meets this burden, the nonmoving party must then set forth “specific facts showing that there is a genuine issue for trial.” *Id.*; *accord* Fed. R. Civ. P. 56(e).

The issue of indefiniteness under § 112 is a question of law and can be resolved on summary judgment. *See ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). The definiteness requirement “is drawn from the court's performance of its duty as the construer of patent claims.” *Atmel Corp. v. Info. Storage Devices*, 198 F.3d 1374, 1378 (Fed. Cir. 1999). The ultimate issue is whether someone working in the relevant technical field could understand the bounds of a claim. *Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 783 (Fed. Cir. 2010). Specifically, “[a] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. ___, 134 S. Ct. 2120, 2124 (2014).

Importantly, if a claim contains a term creating a logical inconsistency, the claim is invalid, even if the “logical inconsistency would be most easily resolved by the simple deletion of the [offending term].” *Michael S. Sutton Ltd. v. Nokia Corp.*, 647 F. Supp. 2d 737, 745 (E.D. Tex. 2009) (Davis, J.); *see also Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1349 (Fed. Cir. 2002) (“[I]t is of no moment that the contradiction is obvious: semantic indefiniteness of claims is not rendered unobjectionable merely because it could have been corrected.”) (internal citations and quotations omitted).

Although extrinsic evidence (*e.g.*, expert evidence) may be consulted to determine whether a claim term is indefinite, a court need not rely on extrinsic evidence.² *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (“In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.”); *e.g., Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1319 (Fed. Cir. 2012) (holding that the district court did not err by refusing to allow expert evidence before construing a term as indefinite under § 112 ¶ 6). Here, the ambiguity in the scope of the ‘111 patent is apparent on its face, and Parallel cannot present non-conclusory evidence that will raise a genuine issue of fact.

² Parallel’s Response Letter Brief, Dkt. No. 872, cited two pre-*Nautilus* cases for its proposition that “attorney argument alone will not suffice for the movant to meet its burden on a motion for summary judgment on indefiniteness.” Both of Parallel’s cases contradict its position. First, *ElCommerce.com* (which is vacated and carries no precedential weight) explicitly stated: “We do not of course hold that expert testimony will always be needed for every situation . . .” *Elcommerce.com, Inc. v. SAP AG*, 745 F.3d 490, 506 vacated, 564 F. App’x 599 (Fed. Cir. 2014). Second, *Cyber Acoustics* also explicitly states that “such evidence is not per se required.” *Cyber Acoustics, LLC v. Belkin Int’l, Inc.*, 3:13-CV-01144-SI, 2014 WL 1225198 (D. Or. Mar. 24, 2014). Parallel is also wrong that the Supreme Court’s *Nautilus* opinion created a “new standard [that] places an increased emphasis on what a person skilled in the art would understand.” Both before and after *Nautilus*, indefiniteness is examined from the perspective of persons of ordinary skill in the art. All *Nautilus* did was lower the bar to find indefiniteness from an “insolubly ambiguous” standard to a “reasonable certainty” standard.

Although Defendants may refer to expert evidence in their discussion, they do not need to present an expert to opine upon the ultimate issue to meet their burden. To hold otherwise would contradict the Supreme Court's instructions in *Celotex*.

B. The limitations “data items” and “pre-loaded values” are indefinite.

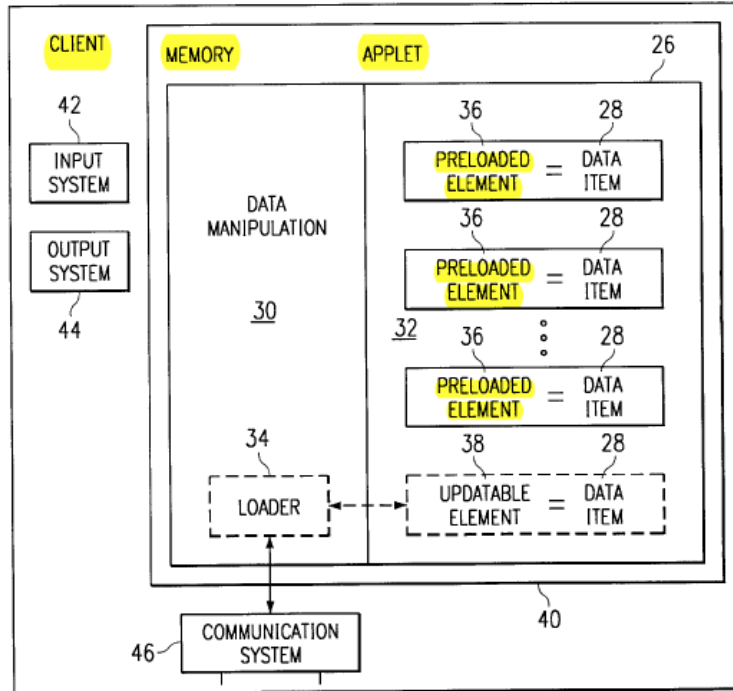
The specification of the '111 patent does not provide a person of ordinary skill in the art sufficient information to understand any structural distinctions between “data items” and “pre-loaded values.” The distinction between these two terms is of paramount importance as each independent claim uses both terms differently; namely, the applet is configured to provide a plurality of operations “on” the “pre-loaded values,” and the operations comprise operations “associated with . . . data items.” Defendants have proposed constructions for these terms that attempt to ground these terms in a way that is definite, tangible, and makes sense in context. Data items are pieces of information, and pre-loaded values are storage locations in the applet's memory footprint that are initialized with data items during the applet's generation. Should the Court disagree, the specification provides inconclusive and contradictory hints for interpreting the structural differences between “data items” and “pre-loaded values,” and as a result these terms are indefinite.

1. The specification does not teach a structural distinction between “pre-loaded values” and “data items.”

Aside from the claims and a portion of the specification that parrots the claim language, the term “pre-loaded value” is wholly absent from the specification (other than

the Summary that parrots parts of the claim language). Fig. 1 and other portions of the specification, however, do refer to “pre-loaded elements.”

Assuming that “pre-loaded elements” and “pre-loaded values” are intended to be synonymous, the patent leaves a few bread crumbs for drawing the distinction between “pre-loaded elements” and “data items” and then proceeds to sweep those bread crumbs away. Some portions of the patent imply that “pre-loaded elements” represent some sort of data storage location (i.e., a space in the applet’s memory footprint when sent to the client) and that “data items” represent information that may be placed in that storage location. For example, pre-loaded elements are apparently “in the applet.” ’111 patent at Claim 1, 17. They are “*initialized* using respective data items 28 retrieved by the web server application 20.” *Id.* at 11:31-34. And they can change from their initialized state: “the pre-loaded elements 36 will only change in response to data or input from the client 12.” *Id.* at 11:34-39. Furthermore, pre-loaded elements are shown as a portion of the applet’s memory footprint in Figure 1 below (annotated):



But the patent leaves third-parties guessing as to whether “pre-loaded values” are the same as these pre-loaded elements. And furthermore, some portions of the specification and claims are ambiguous in whether to structurally equate pre-loaded elements / values with data items. Fig. 1 shows “pre-loaded element = data item” within a box in memory, possibly equating the two. Further, data items may be “represented as pre-loaded elements.” *Id.* at 12:29-30 (emphasis added); *see also* 15:48-49. Claims 1 states that each data item is “used as at lease [sic] one pre-loaded value in the applet” (emphasis added). Claim 17 states that the applet “includ[es] a subset of the data items therein as pre-loaded values.” (emphasis added). The generated applet of Claims 1 and 17 is capable of performing a plurality of “operations *on*” pre-loaded values.

2. Parallel's proposed constructions do not provide a POSITA with reasonable certainty of the scope of the claim terms.

Parallel's proposed constructions for both pre-loaded values and data items lack any structure. It contends that a pre-loaded value is just a type of data item, and that data items are just "pieces of data." That cannot be the case. First, the patentee explicitly used distinct terms in the claims and there is no plausible reason to rebut the presumption that they are different. *See Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999) (the doctrine of claim differentiation is "ultimately based on the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope . . ."). But more importantly, the claimed generated applet would lack definite structure, since the claims recite one of its "constituent systems" in terms of only pre-loaded values and data items. Claim 1 requires: "*a constituent system associated with the applet comprising a subset of the data items, each data item in the subset used as at least [sic] one pre-loaded value in the applet.*"

Thus, the question becomes: what exactly is a claimed "pre-loaded value" of the generated applet? The Court has construed the applet to be, at a high-level, "program code" transmitted to the client. Is the pre-loaded value a portion of that code, such as a location in the applet transmitted to the client, containing a series of bytes representing data? That would be consistent with the patent's teaching that the "applet" is a program with a "payload of data occupying the data storage system." '111 patent at 12:52-55.

On the other hand, if both "pre-loaded value" and "data items" are intangible information without structure, then a POSITA would run into the problem of reasonably explaining the scope of the first "constituent system associated with the applet." It must

be distinguishable from the “*further* constituent system” that comprises the data interface capability of Claims 1 and 17. See ‘111 patent, Fig. 1 (identifying separate data manipulation system 30 (which would include the data interface functionality) and data storage system 32 (which includes pre-loaded values and/or data items)). And it must exclude aspects of the claimed system that reside elsewhere, like on the on the server. Yet Parallel seeks for this constituent system to be construed as an intangible concept—a “system” —without bounds, merely having the function of “comprising” information and “related” to the applet. Parallel contends that it is just a “portion” of the “data processing system.” Pl.’s *Markman* Brief, Dkt. 380, at 16-18. Under Parallel’s interpretation, that system would be purely functional, since Parallel does not propose any particular structure. In that light, the specification does not teach a POSITA any “clear-cut” bounds for a constituent system comprising pre-loaded values and/or data items that distinguishes it from other aspects of the data processing system. *Halliburton Energy Services, Inc. v. MI LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008) (“[U]se of functional language can fail to provide a clear-cut indication of the scope of subject matter embraced by the claim and thus can be indefinite.”) (quotation removed) Importantly, the specification provides no bounds to a POSITA that would allow him or her to define the scope of these two systems. The specification explains only that “[t]he applet 26 may be generated *in a variety of ways*.” ‘111 patent at 12:12-27.

The implications of these ambiguities are already evident in the case. Parallel and its expert (Mr. Denning) arbitrarily draw lines around the two alleged “constituent systems” of the applet, including or excluding aspects of the Defendants’ web pages in

whatever manner they believe will lead to infringement.³ The definiteness requirement of Section 112 was enacted to prevent exactly this. *Gen. Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369 (1938) (“The statute seeks to guard against unreasonable advantages to the patentee and disadvantages to others arising from uncertainty as to their rights.”).

A brief look at Parallel’s and its expert’s contentions illustrates this point. For example, with respect to Internet Brands, Parallel identifies the following lines of audiforums.com web page code as constituting a “subset of the data items, each data item in the subset used as at least one pre-loaded value in the applet”:⁴

```

680         var makeModel = {"makes":{"name":"Audi","models":{"name":"100"},{"name":"200"},
681 {"name":"4000"},{"name":"5000"},{"name":"80"},{"name":"90"},{"name":"A3"},{"name":"A4"},{"name":"A5"},
682 {"name":"A6"},{"name":"A8"},{"name":"Allroad"},{"name":"Cabriolet"},{"name":"Coupe"},{"name":"Fox"},
683 {"name":"GT"},{"name":"Q5"},{"name":"Q7"},{"name":"Quattro"},{"name":"R8"},{"name":"RS4"},
684 {"name":"RS6"},{"name":"S4"},{"name":"S5"},{"name":"S6"},{"name":"S8"},
685 {"name":"TT"}},{"allowShowAll":"true"}};
```

Under Parallel’s interpretation of these claim terms—both being “data items”—what would be the claimed “pre-loaded values” and what would be the claimed “data items”? Would, for example, a “pre-loaded value” be the tangible four characters containing “Audi” in the HTML web page document at line 680? Or would it be complete character sequence of the JavaScript Object literal that is “the comma-separated list of colon-separated name:value pairs enclosed within curly braces”⁵ containing multiple car names (e.g., “100”)? Is it instead the abstract “makeModel” object variable that will point

³ In response to Defendants’ contention that Parallel’s expert was “cherry-picking” web page code to define the bounds of a generated applet and avoid links, the Court stated that “Parallel’s initial problem is that it does not provide any reason why the applet’s execution does not begin when the browser first encounters an external reference that the applet explicitly needs.” Order, Dkt. No. 824 at 10-11.

⁴ Denning Decl. ¶¶ 97-100.

⁵ See Denning Decl. ¶ 55 (defining “object literal”).

to a separate in-memory representation on the client once the web browser parses these lines?⁶ Would it just be the intangible *notion* of an “Audi”? Could it be any or all of these? Once a “pre-loaded value” is identified, what then would be the “data item”? Under Parallel’s interpretation, the patent did not teach a POSITA at the time of filing how to apply both of these claim terms here with any certainty.

Being able to nail down the scope of these terms matters today because infringement or non-infringement depends upon the scope of the terms. For example, if the pre-loaded value is a character sequence in the transmitted text in portions of the “applet” (the program code in the HTML document) such as “Audi,” or all the characters between curly braces, there would be no applet data interface operating on them since they are no longer needed after parsing.⁷ That is, the client, using its own resources,⁸ already accessed the pre-loaded values and is using its own in-memory representations of the data.⁹ If it is the “makeModel” JavaScript object, then it is not “pre-loaded” with any data by the server since the object is not actually initialized with any data until its

⁶ See Denning Decl. ¶ 31 (“When an HTML document arrives at a web browser, it is parsed and converted into the browser’s internal data structure representation in memory. Once the internal data structure has been built, the HTML document that was received by the browser is no longer needed in order to present the document to the user”).

⁷ See Denning Decl. ¶ 31 (“Once the internal data structure has been built, the HTML document that was received by the browser is no longer needed in order to present the document to the user.”).

⁸ See Denning Decl. ¶ 77 (“JavaScript programs (scripts) are not compiled prior to being loaded into the client’s web browser and therefore cannot be packaged with all of the resources they require in order to execute beforehand.”) and 43 (“In order to execute JavaScript, the code must either be interpreted or, in modern browsers, Just In Time (JIT) compiled. Modern browsers tend to use just-in-time (JIT) compilers to maximize the execution speed of JavaScript programs.”).

⁹ Denning Decl. ¶ 55 (“All of these resources are downloaded into the browser’s memory and are available to the applet prior to its execution.”)

declaration statement is executed by the client.¹⁰ If it is just the intangible notion of a car make, then the first “constituent system” has no structural bounds in order to concretely state whether links in the web page document should or should not fall within that system. This is certainly not an exhaustive list. And that Parallel may disagree with these positions regarding infringement today does not affect the definiteness of the claims at the time of filing. The ambiguous scope does not give clear guidance to a POSITA as to what these terms mean, that ambiguity matters, and these terms are therefore indefinite.

Consequently, if the Court does not agree with Defendants’ proposed construction for “pre-loaded values” and “data items,” these terms are indefinite because a person of ordinary skill in the art would not, with reasonable certainty, have been able to understand the scope of these terms at the time of filing.

C. The limitation “[a data interface capability] configured to provide a plurality of operations on [the pre-loaded values]” is indefinite.

The phrase “[a data interface capability] configured to provide a plurality of operations on [the pre-loaded values]” is indefinite because the ’111 patent does not inform a POSITA of what constitutes a data interface capability configured to provide a plurality of operations “on” “pre-loaded values.” As set forth in Defendants’ claim construction brief, the purpose of this term is to configure (i.e., customize) a “data interface capability” such that the client is “allow[ed] to access or use” the data stored in pre-loaded values. Defendants’ Response Claim Construction Brief 7-9. For example, if

¹⁰ Compare Denning Decl. ¶ 55 (stating that the object literal “makeModel” is only “declared” in the file); See also, *Parallel Networks, LLC v. Abercrombie & Fitch Co.*, 704 F.3d 958, 969 (Fed. Cir. 2013) (“In any event, the critical point for purposes of this case is that the applet cannot be finalized at the client, whether by an “external program,” a “web server application,” or some other mechanism.”).

the data is stored in a particular database system in the applet, the server includes in the generated applet “suitable functionality for accessing the database data.” ’111 patent at 11:24:29. The problem with this limitation is that a POSITA would not know how to clearly delineate whether such “suitable” functionality, via *multiple* operations, has been added to the applet’s data interface capability.

The specification does not define “operation,” and does not otherwise use that term in the context of data interfacing. But more importantly, the patent does not define what constitutes an operation “on” a “pre-loaded value” by a “data interface capability.” The patent only gives one example for such an operation: “accessing the database data included in the applet” *Id.* After the client is able to access the data from the first constituent system using this functionality, it of course would then be able to “utilize” the retrieved data. But the specification fails to disclose any other kinds of operations on the pre-loaded values that a data interface capability would be configured with besides “accessing.” The question is what else could there be?

The patent provides examples of other kinds of functionality other than data interfacing that may be present in an applet in a data *manipulation* system. ’111 patent at 12:20-27 (“For example, based on the data to be added to the data storage system 32, a prewritten procedure may be added to the data manipulation system 30 to allow the user to scroll a display in order to see all of the data....”). While these describe manipulating data in the abstract by a client, they do not describe *interfacing* with the data in the

applet's storage system.¹¹ Thus, they are not something that a POSITA would understand a data *interface* capability could be configured to provide the client, such that the client could then access or use the pre-loaded values.

Parallel argues that example “operations” could be similar to those mentioned in the fifth definition in the IBM Dictionary of Computing: “an action performed on one or more *data items*, such as adding, multiplying, comparing, or moving.” Dkt. 379 at Exhibit 1, p. 3. The problem with Parallel's chosen definition is that the claims require that the operations—while “associated with” or “specific to” the data items the server placed in the applet—must be performed “on” the “*pre-loaded values*” rather than “data items.” How does a POSITA know whether operations are on “pre-loaded values” or instead, in a non-infringing manner, just on “data items”? The problem presents itself in Mr. Denning's testimony. For example, he contends that “data items” and “pre-loaded values” are in the following lines of web page code that defines the JavaScript object “makeModel”:¹²

```
680         var makeModel = {"makes":[{"name":"Audi","models":[{"name":"100"}, {"name":"200"},
681 {"name":"4000"}, {"name":"5000"}, {"name":"80"}, {"name":"90"}, {"name":"A3"}, {"name":"A4"}, {"name":"A5"},
682 {"name":"A6"}, {"name":"A8"}, {"name":"Allroad"}, {"name":"Cabriolet"}, {"name":"Coupe"}, {"name":"Fox"},
683 {"name":"GT"}, {"name":"Q5"}, {"name":"Q7"}, {"name":"Quattro"}, {"name":"R8"}, {"name":"RS4"},
684 {"name":"RS6"}, {"name":"S4"}, {"name":"S5"}, {"name":"S6"}, {"name":"S8"},
685 {"name":"TT"}], "allowShowAll":"true"}];
```

He points to two JavaScript functions, “populateMakes()” at line 688 and “populateModels(makeIndex, modelName)” at line 716, as comprising the data interface

¹¹ Parallel acknowledges this distinction. See D.I. 526 (Plaintiff Reply ISO Its Opening Claim Construction and Response Brief to MSJ of Non-Infringement) at 2 (“In contrast, defendants’ proposed construction improperly substitutes “data manipulation functionality” for “data interface capability” . . .”).

¹² Denning Decl. ¶¶ 97-100.

capability with a plurality of operations on pre-loaded values.¹³ It is unclear what in lines 680 to 685 that Mr. Denning specifically refers to as the “pre-loaded values.” However, it is clear that the only operation involved is “accessing.” As seen in the two functions Mr. Denning identifies, every appearance of “makeModel” is on the right side of an equals (=) sign, in lines 692 and 720, where that object is being accessed so the client can retrieve its information. No other operations on that object are evident in the code Mr. Denning points to.

Mr. Denning may want to argue that other actions besides accessing are taking place, such as loading the dropdown boxes with car makes (Audi) and corresponding models – activity related to the web page HTML (which Parallel carved out of the alleged applet).¹⁴ But the constituent system consisting of data items Mr. Denning points to is in lines 680-685 of JavaScript code. Once the information has been accessed from the storage in applet (whether as Mr. Denning would describe it or otherwise), the client web browser has no other need to interface with this system of the applet.¹⁵ Mr. Denning clearly has other “operations” in mind, but they are not operating “on” “pre-loaded values” in the lines of the “applet” that he identified, beyond the one operation of accessing.

Thus, as exemplified by Mr. Denning’s opinion, a POSITA reading the specification of the patent cannot distinguish between a “data interface capability”

¹³ Denning Decl. ¶ 101.

¹⁴ *Id.*

¹⁵ See Denning Decl. ¶ 31 (“Once the internal data structure has been built, the HTML document that was received by the browser is no longer needed in order to present the document to the user.”).

configured to provide a plurality of operations on the “pre-loaded values” – which the claims require to be “*in the applet*” – and functionality in the claimed applet that operates on data as it generally exists on the client. This is not surprising, since the only teaching of the specification is that the capability the data interface must be configured to provide is “*suitable* functionality for *accessing* the database data included *in the applet*.” ’111 patent at 11:24:29. It does not explain what kind of operations would be “suitable.”

Parallel should not be able to take advantage of the patentee’s failure to “clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise.” *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942). It should not be allowed to profit from ambiguity by treating the claims as a nose of wax. Consequently, the limitation “[a data interface capability] configured to provide a plurality of operations on [the pre-loaded values]” is indefinite.

D. The limitation “substantially all functionality required by the pre-loaded values” is indefinite.

The phrase “substantially all functionality required by the pre-loaded values” consists of terms of degree of which a POSITA would not be able to determine the bounds. In Parallel’s letter brief, its only response to this argument is that the Court has used terms of degree in construing the claims, and that the Defendants propose a construction for this phrase that uses terms of degree. None of that matters if, at the end of the day, a POSITA would still not be able to place bounds on the scope of this limitation with reasonable certainty.

The patent does not teach a POSITA what is sufficiently “required” by the pre-loaded values. When a word of degree is used, the patent’s specification must provide some standard for measuring that degree. *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005). Here, however, every relevant discussion in this specification regarding this limitation, whether as it concerns the pre-loaded values, the included functionality, or the client’s capabilities, is also couched in terms of degree. There is no measuring stick for a POSITA to use. For example, the patent states that the applet is “*substantially* self-sufficient and depends on *substantially* no services being available on the client for the applet to use.” ’111 patent at 2:59-61. “[T]he applet 26 need not rely on a *substantial* amount of functionality being available on the client.” *Id.* at 12:31-33. The applet “does not require *substantial* preloading of software onto the client.” *Id.* at 12:36-39. The applet “also comprises *substantially all* of the data manipulation capabilities for reviewing, manipulating, and utilizing the data items.” *Id.* at 15:36-39.

Parallel doesn’t contend there is any limitation regarding the client that could be used as a guide. A client need only have an input system, output system, and communication system. See ’111 patent at Fig. 1. Thus, there is no way of telling if any kind of functionality is required because the applet is not being sent to a clearly defined operating environment. What kind of operating system functionality would be required by the pre-loaded values? Must that be included too? Why would an operation for “accessing” the pre-loaded value, if it’s in a particular database format, not be all that is “required”? All data is represented in a computing environment in some particular format, some specified arrangement of bits. At what granularity (bit, byte, byte-order,

word, character, variable, data structure, encoding, programming language, arbitrarily-defined data schema, file format, database system, operating system) does a POSITA look at to judge whether functionality is “required” by a pre-loaded value? The patent is silent on all of this.

The problem with this term today is that Parallel arbitrarily includes or excludes functionality in the Defendants’ web pages in whatever manner it believes will avoid the latest adverse ruling on the scope of the patent. For example, in the *audiforms.com* example discussed above, Parallel points to functionality on “pre-loaded values” such as loading the dropdown boxes with car makes (Audi) and corresponding models.¹⁶ But this activity operates on various aspects of the web page HTML that Parallel does not include in the systems of the alleged applet. Parallel and Mr. Denning do not provide a plausible justification as to why these other aspects of Defendants’ web page would not also be “required” since it clearly relies upon them in its contentions. Nor could they explain how the patent taught a POSITA to draw lines around the applet the way Parallel does today, and not some other way.¹⁷

Consequently, the limitation “substantially all functionality required by the pre-loaded values” is indefinite under Section 112.

¹⁶ Denning Decl. ¶ 101.

¹⁷ This arbitrariness was also on display with respect to *Kayak*. *See, e.g.*, Order, Dkt. No. 836, at 3 (“By claiming the applet’s functions begins on line 134, the applet no longer expressly calls for the external reference that `jQuery.noConflict()` needs, and Mr. Denning thereby places *Kayak* into Group A. However, Mr. Denning provides no justification for excluding the applet code on lines 106–133.”).

VI. CONCLUSION

For all of the foregoing reasons, Defendants respectfully request that the Court grant summary judgment as a matter of law that all asserted claims in U.S. Patent No. 6,446,111 are invalid.

Respectfully submitted,

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Respectfully submitted,

FISH & RICHARDSON P.C.

By: /s/ Neil J. McNabnay
Neil J. McNabnay
Texas Bar No. 24002583
mcnabnay@fr.com
Andrew R. Graben
Texas Bar No. 24045964
graben@fr.com
David B. Conrad
Texas Bar No. 24049042
conrad@fr.com
1717 Main Street, Suite 5000
Dallas, Texas 75201
Telephone: 214-747-5070
Facsimile: 214-747-2091

**COUNSEL FOR DEFENDANTS
BLOOMINGDALE'S INC., JOS. A. BANKS
CLOTHIERS, INC., KAYAK SOFTWARE
CORPORATION, ORBITZ LLC, ORBITZ
AWAY LLC, ORBITZ WORLDWIDE INC.,
ORBITZ WORLDWIDE LLC,
SHOEBUY.com, INC., WOLVERINE
WORLD WIDE, INC.**

By: /s/ John M Caracappa
John M. Caracappa
DC Bar No. 476543
jcaracappa@steptoe.com
Paul A. Gennari
DC Bar No. 469401
pgennari@steptoe.com
Tremayne M. Norris
DC Bar No. 991049
tnorris@steptoe.com
Steptoe & Johnson LLP
1330 Connecticut Ave NW
Washington, District of Columbia 20036
Telephone: (202) 429-3000
Facsimile: (202) 429-3902

J. Thad Heartfield
Texas Bar No. 09346800
thad@jth-law.com
M. Dru Montgomery
Texas Bar No. 24010800
dru@jth-law.com
The Heartfield Law Firm
2195 Dowlen Road
Beaumont, Texas 77706
Telephone: (409) 866-3318
Facsimile: (409) 866-5789

**COUNSEL FOR DEFENDANTS
BACKSTAGE WEB, INC., CHRISTIAN
AUDIGIER, INC. and WALT DISNEY
PARKS AND RESORTS ONLINE**

By: /s/ Patrick T. Muffo

Joseph R. Lanser

Illinois Bar No. 6272587

Email: jlanser@seyfarth.com

Patrick T. Muffo

Illinois Bar No. 6298584

Email: pmuffo@seyfarth.com

SEYFARTH SHAW LLP

131 S. Dearborn Street, Suite 2400

Chicago, IL 60603-5577

Telephone: (312) 460-5000

**ATTORNEYS FOR DEFENDANTS
BALLARD DESIGNS, INC. AND THE
TERRITORY AHEAD, INC.**

By: /s/ Michael P. Adams

Michael P. Adams

Texas Bar No. 00872050

Email: madams@jw.com

JACKSON WALKER L.L.P.

100 Congress Avenue, Suite 1100

Austin, TX 78701

Telephone: (512) 236-2048

Facsimile: (512) 691-4448

Melissa R. Smith

Texas Bar No. 24001351

Email: Melissa@gillamsmithlaw.com

GILLAM & SMITH, L.L.P.

303 S. Washington Ave.

Marshall, TX 75670

Telephone: (903) 934-8450

Facsimile: (903) 934-9257

**COUNSEL FOR DEFENDANT INTERNET
BRANDS, INC.**

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on September 8, 2014 to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ David B. Conrad
David B. Conrad